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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,176	10/28/2003	Tomonari Horikiri	1232-5185	6564
27123	7590	11/02/2007	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			MOON, SEOKYUN	
ART UNIT		PAPER NUMBER		
2629				
NOTIFICATION DATE		DELIVERY MODE		
11/02/2007		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com  
Shopkins@Morganfinnegan.com  
jmedina@Morganfinnegan.com

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/696,176	HORIKIRI, TOMONARI
	Examiner	Art Unit
	Seokyun Moon	2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 22 August 2007.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 6,8-10 and 13-16 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 6,8-10 and 13-16 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 28 October 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1)  Notice of References Cited (PTO-892)  
 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3)  Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.

4)  Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_ .

5)  Notice of Informal Patent Application

6)  Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. The Applicants' arguments with respect to claim 6 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 6, 8-10, and 13-16** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to **claim 6**, the newly amended claim discloses, “*providing one of said optical modulation members with a plural kind of dyes*” and “*applying a plurality of stimuli individually to different areas of said optical modulation members deposited on said substrate, thereby coloring one of said optical modulation members to a plurality of colors*”. However, the specification and the drawing of the instant application do not explain or show how a single optical modulation member is colored to a plurality of colors. As disclosed in the claim, the optical modulation member is one of an electrophoretic particle, a dispersion medium, or a color filter. However, according to the specification of the instant application [pg 4 lines 20-23, emphasis on line 23 and pg 5 lines 7-8], each of an electrophoretic particle, a dispersion medium, and a color filter is colored to a predetermined color rather than a plurality of colors.

For further examination purpose, the claim limitation will be interpreted as, “*providing one of said optical modulation members with one of a plural kind of dyes*” and “*applying a plurality of stimuli individually to different areas of said optical modulation members deposited on said substrate, thereby coloring one of said optical modulation members to one of a plurality of colors*”, as best understood by the Examiner.

As to **claims 8-10 and 13-16**, the claims are rejected as being dependent upon a claim rejected under 35 U.S.C. 112.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 6, 8-10, and 13-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Katase (US 6,525,865) in view of Loxley (US 6,262,833).

As to **claim 6**, Katase teaches a process for producing an electrophoretic display [abstract lines 1-2] having electrophoretic particles ("*electrophoretic particles 3*") [fig. 16] and a dispersion medium ("*dispersion medium 2*"), and/or a color filter [col. 15 lines 20-30] as optical modulation members comprising steps of:

providing one of the optical modulation members ("*dispersion 1*") [fig. 16] with one of a plural kind of dyes (red, green, and blue) each of which is to be colored to a specified color [col. 19 lines 39-42],  
depositing the optical modulation members on a substrate [fig. 16], and

coloring one of the optical modulation members to one of a plurality of colors [col. 19 lines 39-42].

Katase does not expressly disclose a method of coloring the dyes.

However, Loxley teaches an idea of coloring dyes used to present various colors in an electrophoretic display, using a stimulus ("visible or "ultraviolet light") [col. 17 lines 39-42].

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the idea of Loxley, coloring dyes using a stimulus, to the display of Katase, thus to change the color of the dyes used for changing the color of the dispersion of Katase, in order to allow the display of Katase to change the color of the dyes remotely rather than manufacturing the dyes with predetermined colors.

Katase as modified by Loxley teaches applying a plurality of stimuli (different irradiation of light for each of red, green, and blue) individually to different areas of the optical modulation members (Katase: the optical modulation members included in each of different cells "11C") [Katase: fig. 16] and thus coloring one of the optical modulation members to one of a plurality of colors (red, green, or blue).

As to **claim 8**, Katase [fig. 14] teaches a step of spatially sealing ("sealer 202") hermetically the electrophoretic particles ("electrophoretic particle 3") and the dispersion medium ("dispersion medium 2").

As to **claim 9**, Katase as modified by Loxley teaches that the coloring step is performed after the hermetically sealing step ("changing to another color upon irradiation with either visible or ultraviolet light, in encapsulated electrophoretic display") [Loxley: col. 17 lines 38-46].

As to **claim 10**, Katase as modified by Loxley teaches that the stimuli are selected from the group consisting of thermal energy, light energy, electron ray, y ray, and X ray [Loxley: col. 17 lines 38-41].

As to **claim 13**, Katase as modified by Loxley teaches that the stimuli ("visible or ultraviolet light") are applied in a state that the electrophoretic particles and the dispersion medium are encapsulated in a microcapsule [Loxley: col. 17 lines 38-46].

As to **claim 14**, Katase as modified by Loxley teaches the dye (Katase: the dye included in the medium) [Katase: col. 19 lines 39-42] being encapsulated in a microcapsule (Katase: "*cell having dimension of microns in length*") [Katase: col. 9 lines 50-52].

As to **claim 15**, Katase as modified by Loxley teaches that the dye is a nearinfrared absorption ("visible") colorant [Loxley: col. 17 lines 38-42].

As to **claim 16**, Katase as modified by Loxley teaches that the dye is a mixture of photosensitive to blue, green, and red light ("visible light") [Loxley: col. 17 lines 38-42].

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

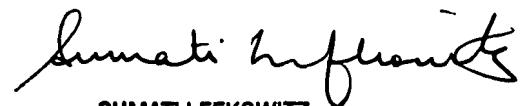
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seokyun Moon whose telephone number is (571) 272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (572) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 22, 2007

- s.m.



SUMATI LEFKOWITZ  
SUPERVISORY PATENT EXAMINER